

FILE 'HOME' ENTERED AT 14:24:16 ON 09 JUN 2004

FILE 'HOME' ENTERED AT 14:24:28 ON 09 JUN 2004

=> index bioscience
FILE 'DRUGMONOG' ACCESS NOT AUTHORIZED
COST IN U.S. DOLLARS
SINCE FILE TOTAL
ENTRY SESSION
FULL ESTIMATED COST 0.21 0.48

INDEX 'ADISCTI, ADISINSIGHT, ADISNEWS, AGRICOLA, ANABSTR, AQUASCI, BIOBUSINESS, BIOCOMMERCE, BIOSIS, BIOTECHABS, BIOTECHDS, BIOTECHNO, CABA, CANCERLIT, CAPLUS, CEABA-VTB, CEN, CIN, CONFSCI, CROPB, CROPU, DISSABS, DDFB, DDFU, DGENE, DRUGB, DRUGMONOG2, ...' ENTERED AT 14:24:41 ON 09 JUN 2004

70 FILES IN THE FILE LIST IN STNINDEX

Enter SET DETAIL ON to see search term postings or to view search error messages that display as 0* with SET DETAIL OFF.

=> s ((acid(3a)protease) or (acid(3a)proteinase))

13	FILE	ADISCTI
3	FILE	ADISINSIGHT
4	FILE	ADISNEWS
558	FILE	AGRICOLA
20	FILE	ANABSTR
169	FILE	AQUASCI
193	FILE	BIOBUSINESS
13	FILE	BIOCOMMERCE
3921	FILE	BIOSIS
830	FILE	BIOTECHABS
830	FILE	BIOTECHDS
929	FILE	BIOTECHNO
1062	FILE	CABA
310	FILE	CANCERLIT

14 FILES SEARCHED...

8105	FILE CAPLUS
147	FILE CEABA-VTB
9	FILE CEN
14	FILE CIN
82	FILE CONFSCI
12	FILE CROPB
25	FILE CROPU
178	FILE DISSABS
92	FILE DDFB
110	FILE DDFU
3899	FILE DGENE

25 FILES SEARCHED

RESULTS SEARCHED...
92 FILE DRUGB
164 FILE DRUGU
1 FILE IMSRESEARCH
5 FILE EMBAL
2008 FILE EMBASE
685 FILE ESBIOBASE
34 FILE FEDRIP
5 FILE FOREGE

```
235 FILE FROSTI
620 FILE FSTA
38 FILES SEARCHED...
1197 FILE GENBANK
5 FILE HEALSAFE
682 FILE IFIPAT
1 FILE IMSPRODUCT
342 FILE JICST-EPLUS
4 FILE KOSMET
1026 FILE LIFESCI
2104 FILE MEDLINE
45 FILE NIOSHTIC
28 FILE NTIS
48 FILE OCEAN
968 FILE PASCAL
53 FILES SEARCHED...
4 FILE PHAR
1 FILE PHARMAML
4 FILE PHIN
86 FILE PROMT
83 FILE PROUSDDR
5 FILE RDISCLOSURE
2105 FILE SCISEARCH
3 FILE SYNTHLINE
1259 FILE TOXCENTER
4023 FILE USPATFULL
215 FILE USPAT2
3 FILE VETB
18 FILE VETU
1172 FILE WPIDS
68 FILES SEARCHED...
6 FILE WPIFV
1172 FILE WPINDEX
```

63 FILES HAVE ONE OR MORE ANSWERS, 70 FILES SEARCHED IN STNINDEX

L1 QUE ((ACID(3A) PROTEASE) OR (ACID(3A) PROTEINASE))

```
=> s l1 (1)(fusarium oxysporum)
1 FILE AGRICOLA
2 FILE BIOSIS
1 FILE BIOTECHABS
1 FILE BIOTECHDS
2 FILE BIOTECHNO
1 FILE CABA
14 FILES SEARCHED...
8 FILE CAPLUS
2 FILE CROPUS
1 FILE DDFU
25 FILES SEARCHED...
1 FILE DRUGU
1 FILE EMBASE
2 FILE ESBIOWEBSITE
38 FILES SEARCHED...
2 FILE IFIPAT
1 FILE LIFESCI
1 FILE MEDLINE
1 FILE PASCAL
58 FILES SEARCHED...
2 FILE SCISEARCH
1 FILE TOXCENTER
79 FILE USPATFULL
9 FILE USPAT2
3 FILE WPIDS
68 FILES SEARCHED...
```

3 FILE WPINDEX

22 FILES HAVE ONE OR MORE ANSWERS, 70 FILES SEARCHED IN STNINDEX

L2 QUE L1 (L) (FUSARIUM OXYSPORUM)

```
=> s 11 (10a) (fusarium oxysporum)
12 FILES SEARCHED...
    4 FILE CAPPLUS
25 FILES SEARCHED...
38 FILES SEARCHED...
    1 FILE IFIPAT
55 FILES SEARCHED...
    1 FILE USPATFULL
68 FILES SEARCHED...
```

3 FILES HAVE ONE OR MORE ANSWERS, 70 FILES SEARCHED IN STNINDEX

L3 QUE L1 (10A) (FUSARIUM OXYSPORUM)

```
=> d rank
F1      4 CAPPLUS
F2      1 IFIPAT
F3      1 USPATFULL
```

	SINCE FILE ENTRY	TOTAL SESSION
COST IN U.S. DOLLARS		
FULL ESTIMATED COST	8.55	9.03

FILE 'CAPPLUS' ENTERED AT 14:33:41 ON 09 JUN 2004
USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT.
PLEASE SEE "HELP USAGETERMS" FOR DETAILS.
COPYRIGHT (C) 2004 AMERICAN CHEMICAL SOCIETY (ACS)

FILE 'IFIPAT' ENTERED AT 14:33:41 ON 09 JUN 2004
COPYRIGHT (C) 2004 IFI CLAIMS(R) Patent Services (IFI)

FILE 'USPATFULL' ENTERED AT 14:33:41 ON 09 JUN 2004
CA INDEXING COPYRIGHT (C) 2004 AMERICAN CHEMICAL SOCIETY (ACS)

```
=> s 13
L4      6 L3
```

```
=> dup rem 14
PROCESSING COMPLETED FOR L4
L5      5 DUP REM L4 (1 DUPLICATE REMOVED)
        ANSWERS '1-4' FROM FILE CAPPLUS
        ANSWER '5' FROM FILE IFIPAT
```

=> d bib abs 1-5

L5 ANSWER 1 OF 5 CAPPLUS COPYRIGHT 2004 ACS on STN
AN 2003:486094 CAPPLUS
DN 139:260027
TI Trypsin-like protease (TLP) production in Fusarium oxysporum and Fusarium venenatum and use of the TLP promoter for recombinant protein (glucoamylase) production
AU Farnworth, Natalie E.; Robson, Geoffrey D.; Trinci, Anthony P. J.; Wiebe, Marilyn G.
CS School of Biological Sciences, University of Manchester, Manchester, M13 9PT, UK
SO Enzyme and Microbial Technology (2003), 33(1), 85-91
CODEN: EMTED2; ISSN: 0141-0229

PB Elsevier Science
DT Journal
LA English
AB The production of native trypsin-like protease (TLP) in wild type strains of *Fusarium oxysporum* (214) and *F. venenatum* (A3/5) was assessed and compared with the expression of recombinant glucoamylase (GAM) under the *F. oxysporum* TLP promoter in *F. venenatum* JeRS 325. In the two non-recombinant strains, TLP was only detected in the supernatants of batch cultures after the onset of stationary phase and TLP production was highest in the presence of a proteinaceous nitrogen source at pH 7.5. In chemostat cultures of *F. oxysporum*, the specific TLP production rate was neg. correlated with specific growth rate ($\mu=0.03-0.09\text{ h}^{-1}$). In *F. venenatum*, A3/5 at dilution rates between 0.06 and 0.15 h^{-1} , specific TLP production was also neg. correlated with specific growth rate. The *F. oxysporum* TLP promoter regulates GAM production in *F. venenatum* JeRS 325, but the specific GAM production rate is known to be constant between 0.05 and 0.19 h^{-1} , showing that regulation of the promoter in the recombinant host differs from that in the native strain. Western blot anal. demonstrated that GAM production began in batch cultures of *F. venenatum* JeRS 325 during the decelerating growth phase, and that de novo synthesis of GAM occurred during stationary phase.

RE.CNT 35 THERE ARE 35 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L5 ANSWER 2 OF 5 CAPLUS COPYRIGHT 2004 ACS on STN
AN 2000:283653 CAPLUS
DN 133:55767
TI Effect of caffeoylshikimic acid of date palm roots on activity and production of *Fusarium oxysporum* f. sp. albedinis cell wall-degrading enzymes
AU El Modafar, C.; Tantaoui, A.; El Boustani, E.
CS Laboratoire de Biotechnologie et Physiopathologie Vegetales, Faculte des Sciences et Techniques de Gueliz, Departement de Biologie, Marrakech, Morocco
SO Journal of Phytopathology (2000), 148(2), 101-108
CODEN: JPHYEB; ISSN: 0931-1785
PB Blackwell Wissenschafts-Verlag GmbH
DT Journal
LA French
AB Caffeoylshikimic acid (CSA), a major phenolic compound of date palm roots, represents one of the resistance factors of the host to *Fusarium oxysporum* f. sp. albedinis. The CSA was tested at various concns. (0.25 to 3 $\mu\text{mol/mL}$) on the activity and the production of *F. oxysporum* f. sp. albedinis cell wall-degrading enzymes (CWDE): proteases, cellulases, pectin methylesterases (PME), polygalacturonases (PG) and polygalacturonate trans-eliminases (PGTE). CSA had very little effect on the activity of the various enzymes, although it greatly reduced their production. The mycelial growth was also affected by CSA, but this does not explain why only the production of CWDE was noticeably reduced. In order to explain this differential effect of CSA on the activity and production of CWDE, in one group of expts. the effect of the products of hydrolysis of CSA (caffeic acid and shikimic acid) was tested and in another, the effect of the products of CSA (quinones) obtained by tyrosinase oxidation was investigated. Shikimic acid did not have a significant effect on the activity of the CWDE but weakly inhibited their production. Caffeic acid showed a larger inhibition of the activity of the various CWDE that was greater than that of CSA, and its inhibiting effect appeared to be more important during their production. The oxidation of CSA by tyrosinase was accompanied by a greater inhibition of the activity of the various CWDE. This inhibition was appreciable in comparison with that observed due to the effect of non-oxidized CSA on CWDE production. In the same way, oxidation of caffeic acid provoked a greater inhibiting effect on the activity of CWDE than unoxidized caffeic acid. These results suggest that CSA generates products of hydrolysis (in particular, caffeic acid) and products of oxidation (quinones) which inhibit the activity of the proteolytic,

cellulolytic and pectinolytic enzymes produced by *F. oxysporum* f. sp.
albedinis in the culture medium.

RE.CNT 42 THERE ARE 42 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L5 ANSWER 3 OF 5 CAPLUS COPYRIGHT 2004 ACS on STN
AN 1995:340823 CAPLUS
DN 122:127548
TI Trypsin-like protease of *Fusarium*, its manufacture with recombinant cells,
and its use in detergent compositions
IN Branner, Sven; Hastrup, Sven
PA Novo Nordisk A/S, Den.
SO PCT Int. Appl., 43 pp.
CODEN: PIXXD2

DT Patent
LA English

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 9425583	A1	19941110	WO 1994-DK177	19940504
	W: AU, BB, BG, BR, BY, CA, CN, CZ, FI, HU, JP, KP, KR, KZ, LK, LV, MG, MN, MW, NO, NZ, PL, RO, RU, SD, SK, UA, US, UZ, VN RW: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, ML, MR, NE, SN, TD, TG				
	AU 9467203	A1	19941121	AU 1994-67203	19940504
	CN 1125465	A	19960626	CN 1994-192515	19940504
	US 5693520	A	19971202	US 1995-553516	19951103

PRAI DK 1993-523 19930505
WO 1994-DK177 19940504

AB A trypsin-like protease from *Fusarium oxysporum* DSM 2672, cDNA encoding
the protease, a DNA construct or vector containing this cDNA, and a method of
preparing the protease with recombinant cells containing the vector are
claimed.

The protease may be used in detergent compns. The cDNA for *F. oxysporum*
protease was cloned, sequenced, and expressed in *Aspergillus oryzae*. The
protease was produced in an inactive prepro form. To convert it to an
active form, an aspartyl protease isolated from *F. oxysporum* supernatants
was added to the fermentation medium. The protease showed a reversed Arg/Lys
specificity relative to bovine trypsin, i.e., it is more Arg-active than
Lys-active. The enzyme was a broad activity optimum between pH 8 and 11
and a temperature optimum of .apprx.40° (at pH 9.5) when using
D-Val-Leu-Lys-pNA as substrate.

L5 ANSWER 4 OF 5 CAPLUS COPYRIGHT 2004 ACS on STN
AN 1991:675327 CAPLUS
DN 115:275327
TI Effect of substrate and pH on the activity of proteases from *Fusarium*
oxysporum var. lini
AU Castro, Ieso Miranda; Lima, Angelica Alves; Paula, Carmem Aparecida;
Nicoli, Jacuques Robert; Brando, Rogelio Lopes
CS Dep. Ind., Univ. Fed. Ouro Preto, Ouro Preto, 35400, Brazil
SO Journal of Fermentation and Bioengineering (1991), 72(2), 132-4
CODEN: JFBIEX; ISSN: 0922-338X

DT Journal
LA English

AB The results obtained in this work suggest that both the pH (through
selective inhibition) and the carbon source (through repression and
acidification or alkalinization of the medium) may play an important role
in the distribution of extracellular proteases in *F. oxysporum* var. lini.

L5 ANSWER 5 OF 5 IFIPAT COPYRIGHT 2004 IFI on STN DUPLICATE 1
AN 10277371 IFIPAT;IFIUDB;IFICDB
TI USE OF ACID-STABLE SUBTILISIN PROTEASES IN ANIMAL FEED; ADJUSTING
NUTRIENT IN ANIMAL FEEDS
INF Kluenter; Anna-Marie, Loerrach, DE

Oestergaard; Peter Rahbek, Virum, DK
Sjoeholm; Carsten, Alleroed, DK

IN Kluenter Anna-Marie (DE); Oestergaard Peter Rahbek (DK); Sjoeholm Carsten (DK)

PAF Unassigned

PA Unassigned Or Assigned To Individual (68000)

AG PATREA L. PABST HOLLAND & KNIGHT LLP, SUITE 2000, ONE ATLANTIC CENTER,
1201 WEST PEACHTREE STREET, N.E., ATLANTA, GA, 30309-3400, US

PI US 2003021774 A1 20030130

AI US 2001-779334 20010208

PRAI DK 2000-200 20000208
US 2000-183133P 20000217 (Provisional)

FI US 2003021774 20030130

DT Utility; Patent Application - First Publication

FS CHEMICAL
APPLICATION

CLMN 12

GI 6 Figure(s).

FIG. 1 shows pH-stability curves, viz. residual protease activity of four proteases (one acid-stable protease of the subtilisin family derived from *Bacillus* sp. NCIMB 40484 (PD 498), and three reference proteases (Sub.Novo, and Sub.Novo(Y217L), both derived from *Bacillus amyloliquefaciens*, and SAVINASE tm) after incubation for 2 hours, at a temperature of 37 degrees C., and at pH-values in the range of pH 2 to pH 11; the activity is relative to residual activity after a 2 hour incubation at pH 9.0, and 5 degrees C.;

FIG. 2 shows pH-activity curves, viz. protease activity between pH 3 and pH 11, relative to the protease activity at pH-optimum, of the same four proteases;

FIG. 3 shows temperature-activity curves at pH 9.0, viz. protease activity at pH 9.0 between 15 degrees C. and 80 degrees C., relative to protease activity at the optimum temperature, of the same four proteases;

FIG. 4 shows pH-stability curves similar to FIG. 1 but for six other acid-stable proteases of the subtilisin family derived from *Bacillus alcalophilus* NCIMB 10438, *Fusarium oxysporum* IFO 4471, *Paecilomyces lilacinus* CBS 102449, *Aspergillus* sp. CBS 102448, *Acremonium chrysogenum* ATCC 48272, *Acremonium kiliense* ATCC 20338;

FIG. 5 shows pH-activity curves similar to FIG. 2 but for the same proteases as in FIG. 4; and

FIG. 6 shows temperature activity curves at pH 9.0 similar to FIG. 3 but for the same proteases as in FIG. 4.

AB Acid-stable proteases of the subtilisin family, their use in animal feed, feed-additives and feed compositions containing such proteases, and methods for the treatment of vegetable proteins using such proteases.

CLMN 12 6 Figure(s).

FIG. 1 shows pH-stability curves, viz. residual protease activity of four proteases (one acid-stable protease of the subtilisin family derived from *Bacillus* sp. NCIMB 40484 (PD 498), and three reference proteases (Sub.Novo, and Sub.Novo(Y217L), both derived from *Bacillus amyloliquefaciens*, and SAVINASE tm) after incubation for 2 hours, at a temperature of 37 degrees C., and at pH-values in the range of pH 2 to pH 11; the activity is relative to residual activity after a 2 hour incubation at pH 9.0, and 5 degrees C.;

FIG. 2 shows pH-activity curves, viz. protease activity between pH 3 and pH 11, relative to the protease activity at pH-optimum, of the same four proteases;

FIG. 3 shows temperature-activity curves at pH 9.0, viz. protease activity at pH 9.0 between 15 degrees C. and 80 degrees C., relative to protease activity at the optimum temperature, of the same four proteases;

FIG. 4 shows pH-stability curves similar to FIG. 1 but for six other acid-stable proteases of the subtilisin family derived from *Bacillus alcalophilus* NCIMB 10438, *Fusarium oxysporum* IFO 4471, *Paecilomyces lilacinus* CBS 102449, *Aspergillus* sp. CBS 102448, *Acremonium chrysogenum* ATCC 48272, *Acremonium*

kiliense ATCC 20338;
 FIG. 5 shows pH-activity curves similar to FIG. 2 but for the same proteases as in FIG. 4; and
 FIG. 6 shows temperature activity curves at pH 9.0 similar to FIG. 3 but for the same proteases as in FIG. 4.

=> index bioscience

FILE 'DRUGMONOG' ACCESS NOT AUTHORIZED

COST IN U.S. DOLLARS

SINCE FILE

TOTAL

ENTRY

SESSION

FULL ESTIMATED COST

28.76

37.79

DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS)

SINCE FILE

TOTAL

ENTRY

SESSION

CA SUBSCRIBER PRICE

-2.77

-2.77

INDEX 'ADISCTI, ADISINSIGHT, ADISNEWS, AGRICOLA, ANABSTR, AQUASCI, BIOBUSINESS, BIOCOMMERCE, BIOSIS, BIOTECHABS, BIOTECHDS, BIOTECHNO, CABA, CANCERLIT, CAPLUS, CEABA-VTB, CEN, CIN, CONFSCI, CROPB, CROPU, DISSABS, DDFB, DDFU, DGENE, DRUGB, DRUGMONOG2, ...' ENTERED AT 14:35:13 ON 09 JUN 2004

70 FILES IN THE FILE LIST IN STNINDEX

Enter SET DETAIL ON to see search term postings or to view search error messages that display as 0* with SET DETAIL OFF.

=> s l1 (10a) (paecilomyces lilacinus)

13 FILES SEARCHED...

25 FILES SEARCHED...

38 FILES SEARCHED...

50 FILES SEARCHED...

64 FILES SEARCHED...

0 FILES HAVE ONE OR MORE ANSWERS, 70 FILES SEARCHED IN STNINDEX

L6 QUE L1 (10A) (PAECILOMYCES LILACINUS)

=> s l1 (1) (paecilomyces lilacinus)

13 FILES SEARCHED...

25 FILES SEARCHED...

38 FILES SEARCHED...

1 FILE IFIPAT

57 FILES SEARCHED...

5 FILE USPATFULL

68 FILES SEARCHED...

2 FILES HAVE ONE OR MORE ANSWERS, 70 FILES SEARCHED IN STNINDEX

L7 QUE L1 (L) (PAECILOMYCES LILACINUS)

=> d rank

F1 5 USPATFULL

F2 1 IFIPAT

=> file hits

COST IN U.S. DOLLARS

SINCE FILE

TOTAL

ENTRY

SESSION

FULL ESTIMATED COST

5.13

42.92

DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS)

SINCE FILE

TOTAL

ENTRY

SESSION

CA SUBSCRIBER PRICE

0.00

-2.77

FILE 'USPATFULL' ENTERED AT 14:40:39 ON 09 JUN 2004
CA INDEXING COPYRIGHT (C) 2004 AMERICAN CHEMICAL SOCIETY (ACS)

FILE 'IFIPAT' ENTERED AT 14:40:39 ON 09 JUN 2004
COPYRIGHT (C) 2004 IFI CLAIMS(R) Patent Services (IFI)

=> s 17
L8 6 L7

=> dup rem 18
PROCESSING COMPLETED FOR L8
L9 5 DUP REM L8 (1 DUPLICATE REMOVED)
 ANSWERS '1-5' FROM FILE USPATFULL

=> d bib abs 1-5

L9 ANSWER 1 OF 5 USPATFULL on STN DUPLICATE 1
AN 2003:29832 USPATFULL
TI Use of acid-stable subtilisin proteases in animal feed
IN Sjoeholm, Carsten, Alleroed, DENMARK
 Oestergaard, Peter Rahbek, Virum, DENMARK
 Kluenter, Anna-Marie, Loerrach, GERMANY, FEDERAL REPUBLIC OF
PI US 2003021774 A1 20030130
AI US 2001-779334 A1 20010208 (9)
PRAI DK 2000-200 20000208
 US 2000-183133P 20000217 (60)
DT Utility
FS APPLICATION
LREP PATREA L. PABST, HOLLAND & KNIGHT LLP, SUITE 2000, ONE ATLANTIC CENTER,
 1201 WEST PEACHTREE STREET, N.E., ATLANTA, GA, 30309-3400
CLMN Number of Claims: 12
ECL Exemplary Claim: 1
DRWN 3 Drawing Page(s)
LN.CNT 1780
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB Acid-stable proteases of the subtilisin family, their use in animal
 feed, feed-additives and feed compositions containing such proteases,
 and methods for the treatment of vegetable proteins using such
 proteases.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L9 ANSWER 2 OF 5 USPATFULL on STN
AN 2003:288709 USPATFULL
TI Novel variant EGIII-like cellulase compositions
IN Gualfetti, Peter, San Francisco, CA, UNITED STATES
 Mitchinson, Colin, Half Moon Bay, CA, UNITED STATES
 Phillips, Jay, Palo Alto, CA, UNITED STATES
PI US 2003203467 A1 20031030
AI US 2003-441625 A1 20030519 (10)
RLI Division of Ser. No. US 2000-632570, filed on 4 Aug 2000, PENDING
DT Utility
FS APPLICATION
LREP Genencor International, Inc., 925 Page Mill Road, Palo Alto, CA,
 94034-1013
CLMN Number of Claims: 22
ECL Exemplary Claim: 1
DRWN 5 Drawing Page(s)
LN.CNT 2448
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB The present invention relates to novel variant EGIII or EGIII-like
 cellulases that have improved stability. The variant cellulases have
 performance sensitive residues replaced to a residue having modified
 stability.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L9 ANSWER 3 OF 5 USPATFULL on STN
AN 2003:265403 USPATFULL
TI Novel variant EGIII-like cellulase compositions
IN Gualfetti, Peter, San Francisco, CA, UNITED STATES
Mitchinson, Colin, Half Moon Bay, CA, UNITED STATES
Phillips, Jay, Palo Alto, CA, UNITED STATES
PI US 2003186418 A1 20031002
AI US 2003-441626 A1 20030519 (10)
RLI Division of Ser. No. US 2000-632570, filed on 4 Aug 2000, PENDING
DT Utility
FS APPLICATION
LREP Genencor International, Inc., 925 Page Mill Road, Palo Alto, CA,
94034-1013
CLMN Number of Claims: 22
ECL Exemplary Claim: 1
DRWN 5 Drawing Page(s)
LN.CNT 2451

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB The present invention relates to novel variant EGIII or EGIII-like cellulases that have improved stability. The variant cellulases have performance sensitive residues replaced to a residue having modified stability.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L9 ANSWER 4 OF 5 USPATFULL on STN
AN 2003:253540 USPATFULL
TI Variant EGIII-like cellulase compositions
IN Gualfetti, Peter, San Francisco, CA, United States
Mitchinson, Colin, Half Moon Bay, CA, United States
Phillips, Jay, Palo Alto, CA, United States
PA Genencor International, Inc., Palo Alto, CA, United States (U.S.
corporation)
PI US 6623949 B1 20030923
AI US 2000-632570 20000804 (9)
DT Utility
FS GRANTED
EXNAM Primary Examiner: Patterson, Jr., Charles L.
LREP Genencor International, Inc
CLMN Number of Claims: 12
ECL Exemplary Claim: 1
DRWN 5 Drawing Figure(s); 5 Drawing Page(s)
LN.CNT 2361

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB The present invention relates to novel variant EGIII or EGIII-like cellulases that have improved stability. The variant cellulases have performance sensitive residues replaced to a residue having modified stability.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L9 ANSWER 5 OF 5 USPATFULL on STN
AN 2003:161939 USPATFULL
TI Variant EGIII-like cellulase compositions
IN Day, Anthony G., San Francisco, CA, United States
Gualfetti, Peter, San Francisco, CA, United States
Mitchinson, Colin, Half Moon Bay, CA, United States
Shaw, Andrew, San Francisco, CA, United States
PA Genencor International, Inc., Palo Alto, CA, United States (U.S.
corporation)
PI US 6579841 B1 20030617
AI US 2000-633085 20000804 (9)
RLI Continuation-in-part of Ser. No. US 1998-216295, filed on 18 Dec 1998,

now patented, Pat. No. US 6268328
DT Utility
FS GRANTED
EXNAM Primary Examiner: Gupta, Yogendra N.; Assistant Examiner: Elhilo, Eisa
LREP Genencor International, Inc.
CLMN Number of Claims: 21
ECL Exemplary Claim: 1
DRWN 5 Drawing Figure(s); 5 Drawing Page(s)
LN.CNT 1729
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB The present invention relates to novel variant EGIII or EGIII-like cellulases which have improved stability. The variant cellulases have performance sensitive residues replaced to a residue having modified stability.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

=> s l1 (1) (acremonium chrysogenum)
L10 10 L1 (L) (ACREMONIUM CHRYSOGENUM)

=> index bioscience
FILE 'DRUGMONOG' ACCESS NOT AUTHORIZED

COST IN U.S. DOLLARS	SINCE FILE ENTRY	TOTAL SESSION
FULL ESTIMATED COST	12.16	55.08
DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS)	SINCE FILE ENTRY	TOTAL SESSION
CA SUBSCRIBER PRICE	0.00	-2.77

INDEX 'ADISCTI, ADISINSIGHT, ADISNEWS, AGRICOLA, ANABSTR, AQUASCI, BIOBUSINESS, BIOCOMMERCE, BIOSIS, BIOTECHABS, BIOTECHDS, BIOTECHNO, CABA, CANCERLIT, CAPLUS, CEABA-VTB, CEN, CIN, CONFSCI, CROPB, CROPU, DISSABS, DDFB, DDFU, DGENE, DRUGB, DRUGMONOG2, ...' ENTERED AT 14:41:37 ON 09 JUN 2004

70 FILES IN THE FILE LIST IN STNINDEX

Enter SET DETAIL ON to see search term postings or to view search error messages that display as 0* with SET DETAIL OFF.

=> s l1 (10a) (acremonium chrysogenum)
12 FILES SEARCHED...
4 FILE CAPLUS
25 FILES SEARCHED...
37 FILES SEARCHED...
52 FILES SEARCHED...
67 FILES SEARCHED...
1 FILE WPIDS
1 FILE WPINDEX

3 FILES HAVE ONE OR MORE ANSWERS, 70 FILES SEARCHED IN STNINDEX

L11 QUE L1 (10A) (ACREMONIUM CHRYSOGENUM)

=> d rank
F1 4 CAPLUS
F2 1 WPIDS
F3 1 WPINDEX

=> file hits
COST IN U.S. DOLLARS SINCE FILE TOTAL
SESSION
FULL ESTIMATED COST 2.85 57.93

DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS)	SINCE FILE ENTRY	TOTAL SESSION
CA SUBSCRIBER PRICE	0.00	-2.77

FILE 'CAPLUS' ENTERED AT 14:44:43 ON 09 JUN 2004
 USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT.
 PLEASE SEE "HELP USAGETERMS" FOR DETAILS.
 COPYRIGHT (C) 2004 AMERICAN CHEMICAL SOCIETY (ACS)

FILE 'WPIDS' ENTERED AT 14:44:43 ON 09 JUN 2004
 COPYRIGHT (C) 2004 THOMSON DERWENT

FILE 'WPINDEX' ACCESS NOT AUTHORIZED

=> s l11
 L12 5 L11

=> dup rem l12
 PROCESSING COMPLETED FOR L12
 L13 5 DUP REM L12 (0 DUPLICATES REMOVED)
 ANSWERS '1-4' FROM FILE CAPLUS
 ANSWER '5' FROM FILE WPIDS

=> d bib abs 1-5

L13 ANSWER 1 OF 5 CAPLUS COPYRIGHT 2004 ACS on STN
 AN 1992:649981 CAPLUS
 DN 117:249981
 TI Protease C manufacture with Acremonium chrysogenum, and its industrial uses
 IN Petkovic, Tomislav
 PA KRKA, tovarna zdravil, p.o., Yugoslavia
 SO Eur. Pat. Appl., 10 pp.
 CODEN: EPXXDW
 DT Patent
 LA English
 FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	EP 498452	A2	19920812	EP 1992-102078	19920207
	EP 498452	A3	19921216		

R: AT, DE, IT, NL
 PRAI YU 1991-226 19910207

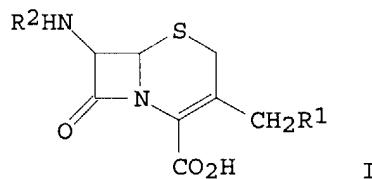
AB Protease C is manufactured by aerobic cultures of Acremonium chrysogenum in a medium containing C, N, and mineral sources, vitamins, and amino acids. Uses of protease C in industries related to leather, feed, dairy, textiles, pharmaceuticals, tobacco, and the waste water treatment are also claimed.

L13 ANSWER 2 OF 5 CAPLUS COPYRIGHT 2004 ACS on STN
 AN 1992:19724 CAPLUS
 DN 116:19724
 TI Microbial manufacture of 7-aminocephem compounds or salts thereof
 IN Isogai, Takao; Fukagawa, Masao; Iwami, Morita; Aramori, Ichiro; Kojo, Hitoshi
 PA Fujisawa Pharmaceutical Co., Ltd., Japan
 SO Eur. Pat. Appl., 86 pp.
 CODEN: EPXXDW
 DT Patent
 LA English

FAN.CNT 2

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	EP 436355	A2	19910710	EP 1990-313988	19901220
	EP 436355	A3	19911009		

EP 436355	B1	19960508		
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE				
JP 04234994	A2	19920824	JP 1990-338897	19901130
JP 3057759	B2	20000704		
JP 2000152796	A2	20000606	JP 2000-2148	19901130
JP 3239359	B2	20011217		
JP 2001186894	A2	20010710	JP 2000-350331	19901130
AT 137803	E	19960515	AT 1990-313988	19901220
ES 2086386	T3	19960701	ES 1990-313988	19901220
CA 2032963	AA	19910628	CA 1990-2032963	19901221
CA 2032963	C	20020219		
HU 58368	A2	19920228	HU 1990-8442	19901221
HU 212767	B	19961128		
PRAI JP 1989-342113	A	19891227		
JP 1990-193609	A	19900720		
JP 1990-338897	A3	19901130		
JP 2000-2148	A3	19901130		
OS MARPAT 116:19724				
GI				



AB A method for producing 7-aminocephem compds. I (R1 = H, OH, acetoxy) with an *Acremonium chrysogenum* capable of producing II (I, R1 = as above; R2 = C(:O)CO2H, CO2H, CH(NH2)CO2H) transformed with a plasmid encoding enzyme(s) capable of converting II to I. I are precursors of cephalosporin antibiotics. The cephalosporin C acylase (CC acylase) gene of *Pseudomonas diminuta* was cloned. Expression plasmids containing the CC acylase gene (pHBV1), the CC acylase gene and a D-amino acid oxidase gene (pHDV11), and the D-amino acid oxidase gene alone (pHDB3) were prepared. *A. chrysogenum* BC2116 was transformed with these plasmids and cultured. Plasmid pHBV1-containing cultures produced 7-amino-3-acetoxymethyl-3-cephem-4-carboxylic acid (7ACA) and 7-amino-3-hydroxymethyl-3-cephem-4-carboxylic acid (7ADCA). Plasmid pHDV11-containing cultures produced 7ACA, 7ADCA, and 7-(4-carboxybutamido)-3-hydroxymethyl-3-cephem-4-carboxylic acid (GL-7ADCA). Plasmid pHBD3-containing transformants produced GL-7ADCA and 7-(4-carboxybutamido)-3-acetoxymethyl-3-cephem-4-carboxylic acid.

L13 ANSWER 3 OF 5 CAPLUS COPYRIGHT 2004 ACS on STN

AN 1991:507455 CAPLUS

DN 115:107455

TI Cloning and nucleotide sequences of the complementary and genomic DNAs for the alkaline protease from *Acremonium chrysogenum*

AU Isogai, Takao; Fukagawa, Masao; Kojo, Hitoshi; Kohsaka, Masanobu; Aoki, Hatsuo; Imanaka, Hiroshi

CS Explor. Res. Lab., Fujisawa Pharm. Co., Ltd., Tsukuba, 300-26, Japan

SO Agricultural and Biological Chemistry (1991), 55(2), 471-7
CODEN: ABCHA6; ISSN: 0002-1369

DT Journal

LA English

AB cDNA encoding *A. chrysogenum* alkaline protease (Alp) was isolated from the *A. chrysogenum* ATCC11550 cDNA library by express-blot assay. The genomic DNAs encoding *A. chrysogenum* Alp were isolated from the *A. chrysogenum* genomic DNA library using the cloned cDNA as a probe. The 3150 nucleotides of the gene were sequenced. The prepro-Alp-consists of 402 amino acids and 2 intervening sequences are found within the coding

region. The amino acid sequence of *A. chrysogenum* Alp has 57% homol. to that of *Aspergillus oryzae* Alp. The entire cDNA encoding *A. chrysogenum* Alp directed the secretion of enzymically active Alp into the culture medium when expressed in *Saccharomyces cerevisiae*.

L13 ANSWER 4 OF 5 CAPLUS COPYRIGHT 2004 ACS on STN
AN 1981:154893 CAPLUS
DN 94:154893
TI Regulation of alkaline exoprotease and cephalosporin C synthesis in *Acremonium chrysogenum* with various carbon and nitrogen sources
AU Shuvalova, I. A.; Bartoshevich, Yu. E.
CS All-Union Res. Inst. Antibiot., Moscow, USSR
SO Antibiotiki (Moscow) (1981), 26(3), 83-8
CODEN: ANTBAL; ISSN: 0003-5637
DT Journal
LA Russian
AB When *A. chrysogenum* was cultivated in a medium containing different C sources, glucose supported maximum growth, followed by maltose, fructose, sucrose, and starch. In contrast, maximum synthesis of alkaline protease [9001-92-7] and cephalosporin C [61-24-5] was observed with starch, followed by sucrose, fructose, maltose, and glucose. The repressive effect of glucose was accompanied by inhibition of arthrospore and conidia formation. Aspartic acid, glutamine, leucine, and norvaline inhibited protease synthesis but stimulated cephalosporin C formation. Methionine and, to a lesser extent, cysteine induced the synthesis of both protease and cephalosporin C and stimulated mycelial fragmentation and sporulation. NH₄⁺, like glucose, repressed the synthesis of protease and cephalosporin and inhibited sporulation.

L13 ANSWER 5 OF 5 WPIDS COPYRIGHT 2004 THOMSON DERWENT on STN
AN 1981-54802D [30] WPIDS
TI Acid proteinase microbiological production - using *Acremonium chrysogenum* strain as enzyme producer for high proteolytic activity.
DC D13 D16
IN KAMYSHKO, O P; KONEV, Y U; KUZNETSOVA, O S
PA (ANTI-R) ANTIBIOTICS ENZYMES
CYC 1
PI SU 779383 B 19801115 (198130)*
PRAI SU 1979-2734475 19790122
AN 1981-54802D [30] WPIDS
AB SU 779383 B UPAB: 19930915
Microbiological production of acid proteinase enzyme with milk-clotting activity includes submerged culturing of *Acremonium chrysogenum* L1A-T-049 producer strain. The strain, described as new is separated from local soil sample.

The acid proteinase biosynthesis is conducted in a culture medium comprising (in weight%): corn extract 0.1; soya bean flour 2.0; ammonium sulphate 0.2; glucose 2.0; starch 2; chalk 0.3 and water to 100 ml at pH 6.7-6.8. The above enzyme is non-toxic and when incubated with pepsin it increases the proteolytic activity of pepsin. Milk clotting activity of acid proteinase containing culture medium is 300 units/ml. Clotting period is 1.5 min. Bul.42/15.11.80.

=> s 11 (10a) (acremonium kiliense)
L14 0 L1 (10A) (ACREMONIUM KILIENSE)

=> index bioscience
FILE 'DRUGMONOG' ACCESS NOT AUTHORIZED

COST IN U.S. DOLLARS	SINCE FILE ENTRY	TOTAL SESSION
FULL ESTIMATED COST	47.57	105.50
DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS)	SINCE FILE	TOTAL

	ENTRY	SESSION
CA SUBSCRIBER PRICE	-2.77	-5.54

INDEX 'ADISCTI, ADISINSIGHT, ADISNEWS, AGRICOLA, ANABSTR, AQUASCI, BIOBUSINESS, BIOCOMMERCE, BIOSIS, BIOTECHABS, BIOTECHDS, BIOTECHNO, CABA, CANCERLIT, CAPLUS, CEABA-VTB, CEN, CIN, CONFSCI, CROPB, CROPU, DISSABS, DDFB, DDFU, DGENE, DRUGB, DRUGMONOG2, ...' ENTERED AT 14:47:38 ON 09 JUN 2004

70 FILES IN THE FILE LIST IN STNINDEX

Enter SET DETAIL ON to see search term postings or to view search error messages that display as 0* with SET DETAIL OFF.

```
=> s l1 (10a) (acremonium kiliense)
15 FILES SEARCHED...
25 FILES SEARCHED...
41 FILES SEARCHED...
60 FILES SEARCHED...
68 FILES SEARCHED...
0* FILE WPINDEX
```

0 FILES HAVE ONE OR MORE ANSWERS, 70 FILES SEARCHED IN STNINDEX

L15 QUE L1 (10A) (ACREMONIUM KILIENSE)

```
=> s l1 (1) (acremonium kiliense)
14 FILES SEARCHED...
25 FILES SEARCHED...
38 FILES SEARCHED...
1 FILE IFIPAT
55 FILES SEARCHED...
2 FILE USPATFULL
68 FILES SEARCHED...
0* FILE WPINDEX
```

2 FILES HAVE ONE OR MORE ANSWERS, 70 FILES SEARCHED IN STNINDEX

L16 QUE L1 (L) (ACREMONIUM KILIENSE)

```
=> d rank
F1          2    USPATFULL
F2          1    IFIPAT
```

	SINCE FILE	TOTAL
COST IN U.S. DOLLARS	ENTRY	SESSION
FULL ESTIMATED COST	19.38	124.88
DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS)	SINCE FILE	TOTAL
	ENTRY	SESSION
CA SUBSCRIBER PRICE	0.00	-5.54

FILE 'USPATFULL' ENTERED AT 15:08:00 ON 09 JUN 2004
CA INDEXING COPYRIGHT (C) 2004 AMERICAN CHEMICAL SOCIETY (ACS)

FILE 'IFIPAT' ENTERED AT 15:08:00 ON 09 JUN 2004
COPYRIGHT (C) 2004 IFI CLAIMS(R) Patent Services (IFI)

	SINCE FILE	TOTAL
COST IN U.S. DOLLARS	ENTRY	SESSION
FULL ESTIMATED COST	13.76	138.64
DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS)	SINCE FILE	TOTAL

CA SUBSCRIBER PRICE

ENTRY SESSION
0.00 -5.54

FILE 'USPATFULL' ENTERED AT 15:13:45 ON 09 JUN 2004

=> s 116

722087 ACID
419755 ACIDS
741139 ACID
 (ACID OR ACIDS)
42474 PROTEASE
24112 PROTEASES
50523 PROTEASE
 (PROTEASE OR PROTEASES)
722087 ACID
419755 ACIDS
741139 ACID
 (ACID OR ACIDS)
14303 PROTEINASE
3003 PROTEINASES
15528 PROTEINASE
 (PROTEINASE OR PROTEINASES)
1208 ACREMONIUM
5 KILIENSE
4 ACREMONIUM KILIENSE
 (ACREMONIUM (W) KILIENSE)
L17 2 L1 (L) (ACREMONIUM KILIENSE)

=> d bib abs 1-2

L17 ANSWER 1 OF 2 USPATFULL on STN
AN 2003:29832 USPATFULL
TI Use of acid-stable subtilisin proteases in animal feed
IN Sjoeholm, Carsten, Alleroed, DENMARK
Oestergaard, Peter Rahbek, Virum, DENMARK
Kluenter, Anna-Marie, Loerrach, GERMANY, FEDERAL REPUBLIC OF
PI US 2003021774 A1 20030130
AI US 2001-779334 A1 20010208 (9)
PRAI DK 2000-200 20000208
 US 2000-183133P 20000217 (60)
DT Utility
FS APPLICATION
LREP PATREA L. PABST, HOLLAND & KNIGHT LLP, SUITE 2000, ONE ATLANTIC CENTER,
1201 WEST PEACHTREE STREET, N.E., ATLANTA, GA, 30309-3400
CLMN Number of Claims: 12
ECL Exemplary Claim: 1
DRWN 3 Drawing Page(s)
LN.CNT 1780
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB Acid-stable proteases of the subtilisin family, their use in animal
feed, feed-additives and feed compositions containing such proteases,
and methods for the treatment of vegetable proteins using such
proteases.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L17 ANSWER 2 OF 2 USPATFULL on STN
AN 94:3686 USPATFULL
TI Proteolytic enzymes
IN Samal, Babru B., Moor Park, CA, United States
Stabinsky, Yitzhak, Lawrenceville, NJ, United States
PA Amgen, Thousand Oaks, CA, United States (U.S. corporation)
PI US 5278062 19940111

AI US 1992-879507 19920501 (7)
RLI Continuation of Ser. No. US 1991-696337, filed on 1 May 1991, now
abandoned which is a continuation of Ser. No. US 1987-35816, filed on 3
Apr 1987, now abandoned
DT Utility
FS Granted
EXNAM Primary Examiner: Wax, Robert A.; Assistant Examiner: Bugaisky, Gabriele
E.
LREP Winter, Robert B.
CLMN Number of Claims: 14
ECL Exemplary Claim: 1
DRWN 12 Drawing Figure(s); 23 Drawing Page(s)
LN.CNT 1080

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB This disclosure relates to a novel class of serine proteases isolated
from a culture medium of fungus *Tritirachium album*. The serine proteases
disclosed have a high degree of stability in detergent formulations.

In addition, this disclosure relates to a process for producing such
serine proteases using recombinant techniques.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

=> log y

COST IN U.S. DOLLARS	SINCE FILE	TOTAL
	ENTRY	SESSION
FULL ESTIMATED COST	6.38	145.02
DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS)	SINCE FILE	TOTAL
	ENTRY	SESSION
CA SUBSCRIBER PRICE	0.00	-5.54

STN INTERNATIONAL LOGOFF AT 15:14:45 ON 09 JUN 2004